CLAIMS

What is claimed is:

1.   A content transformer engine comprising:

        a source content input;

5   a memory element;

        a conversion unit, the conversion unit being operative to:

                receive source content in a first format at the source content input;

                identify the first format of the source content and transform the source

content from the first format into an interim format; and

10   store the source content in the interim format in the memory element.

2.   The content transformer engine of claim 1, wherein the first format is one of a

plurality of SGML formats.

3.   The content transformer engine of claim 1, wherein the interim format is

XML.

4.   The content transformer engine of claim 1, wherein the first format is one of a

plurality of SGML formats and the interim format is XML.

5.   The content transformer engine of claim 1, further comprising:

        a destination content output;

        a destination specific parameter input;

20   and the conversion unit is further operative to:

                receive at least one parameter from the destination specific parameter

input;

                transform the source content from the interim format into a second

format, the second format being selected from a plurality of potential formats based at least in

25   part on the at least one parameter; and

                provide the source content in the second format to the destination

content output.

6.   The content transformer engine of claim 5, wherein the first format is one of a

plurality of SGML formats.

30   7.   The content transformer engine of claim 5, wherein the interim format is

XML.

8.   The content transformer engine of claim 5, wherein the first format and the

second format are one of a plurality of SGML formats and the interim format is XML.

9.   A content transformer engine comprising:

a source content input;

a destination content output;

a destination specific parameter input; and

a conversion unit, the conversion unit being operative to:

receive source content in a source format at the source content input;

receive at least one parameter from the destination specific parameter input;

transform the source content from the source format into an interim format;

transform the source content from the interim format to a destination format, the destination format being selected from a plurality of potential destination formats based at least in part on the at least one parameter; and

provide the destination formatted content to the destination content output.

10.   The content transformer engine of claim 9, wherein the source format is one of a plurality of SGML formats.

11.   The content transformer engine of claim 9, wherein the interim format is XML.

12.   The content transformer engine of claim 9, wherein the source format and the destination format are one of a plurality of SGML formats and the interim format is XML.

13.   An SGML content transformer engine comprising:

an SGML data input;

an SGML data output; and

a conversion unit, the conversion unit being operative to:

receive input data in a first SGML format at the SGML data input;

convert the input data into an interim format;

convert the input data from the interim format to output data, the output data being in a second SGML format based on the characteristics of an intended target for the output data; and

provide the output data to the SGML data output.

14.   A content transformer engine comprising:

a source content input;

a memory element;

a conversion unit, the conversion unit being operative to:

receive source content in a first format at the source content input, the first format being one of a plurality of SGML formats;

identify the first format of the source content and transform the source content from the first format into a second format, the second format being one of a plurality of SGML formats; and

store the source content in the second format in the memory element.

15.   A content transformer engine comprising:

a source content input;

a destination content output;

a destination specific parameter input; and

a conversion unit, the conversion unit being operative to:

receive source content in a source format at the source content input, the source format being one of a plurality of SGML formats;

receive at least one parameter from the destination specific parameter input;

transform the source content from the source format to a destination format, the destination format being selected from a plurality of potential destination formats based at least in part on the at least one parameter; and

provide the destination formatted content to the destination content output.

16.   The content transformer engine of claim 15, wherein the interim format is XML.

17.   The content transformer engine of claim 15, wherein the destination format is one of a plurality of SGML formats.

18.   An SGML content transformer engine comprising:

an SGML data input;

an SGML data output; and

a conversion unit, the conversion unit being operative to:

receive input data in a first SGML format at the SGML data input;

convert the input data from the first SGML format to output data, the output data being in a second SGML format based on the characteristics of an intended target for the output data; and

provide the output data to the SGML data output.

19. A content transformer engine comprising:

a client identifier, the client identifier being operative to receive a content request from a client device, identify client device characteristics from the content request, and by deriving additional information about the client device from implicit sources and previously stored information;

a template database;

a best fit analyzer, the best fit analyzer being operative to select a best fit template from the template database, the best fit template is being selected, based at least in part, on the client device characteristics;

a linker database, the linker database containing location information for a plurality of content resources and access information for each of the plurality of content resources;

an inbound content transformer, the inbound content transformer being operative to receive source formatted content and transform the source formatted content into interim formatted content; and

an outbound content transformer, the outbound content transformer being operative to transform the interim formatted content into destination formatted content in accordance with the best fit template.

20. The content transformer engine of claim 19, wherein the outbound transformer is an extensible style language transformation engine.

21. The content transformer engine of claim 19, wherein the inbound transformer is a reverse extensible style language transformation engine.

22.   The content transformer engine of claim 19, wherein characteristics of the client device comprise at least one of the following characteristics:

screen resolution;

caching capabilities;

device type;

compression characteristics;

decompression characteristics;

network characteristics;

bandwidth characteristics; and

connection type.

23.   A method for providing access to network-based content, the content existing in one of a plurality of SGML formats, to any of a plurality of devices, each of the plurality of devices supporting one of the plurality of SGML formats, the method comprising the steps of:

receiving a content request from a particular device, the content request identifying at least a desired content;

obtaining characteristic parameters about said particular device;

identifying a content source for the desired content, the desired content residing in a first SGML format;

converting the desired content to an interim format;

converting the desired content from the interim format into a particular SGML format based on the characteristic parameters, the particular SGML format being compatible with the particular device; and

delivering the desired content in the particular SGML format to the particular device.

24.   The method of claim 23, wherein the interim format is XML.

25.   A method for providing access to network-based content, the content existing in one of a plurality of SGML formats, to any of a plurality of devices, each of the plurality of devices supporting one of the plurality of SGML formats, the method comprising the steps of:

receiving a content request from a particular device, the content request identifying at least a desired content;

obtaining characteristic parameters about said particular device;

identifying a content source for the desired content, the desired content residing in one of a plurality of SGML formats;

converting the desired content into the XML format;

converting the desired content from the XML format into a particular SGML format based on the characteristic parameters, the particular SGML format being compatible with the particular device; and

5   delivering the requested content to the particular device.

26.   A method for providing access to information stored in one of a plurality of SGML formats to a device supporting one of a plurality of SGML formats, the method comprising the steps of:

receiving a content request from a particular device, the content request
10   identifying at least a desired content;

obtaining characteristic parameters about said particular device, said characteristic parameters at least identifying a desired SGML format and a display resolution for said particular device;

identifying a content source for the desired content, the desired content
15   residing in one of a plurality of SGML formats;

converting the desired content into an interim format;

converting the desired content from the interim format into the desired SGML format based on the characteristic parameters; and

delivering the requested content to the particular device.

20   27.   A server engine for obtaining and delivering desired content to a client device, the desired content residing in a first SGML-based format on a content resource, wherein said desired content may be converted to a second SGML-based format prior to delivery to said client device, said server engine comprising:

a client device interface for receiving a content request from a client device;
25   a client identifier that is operative to interpret the content request to identify characteristics of the client device, interpret the characteristics of the client device to identify the second SGML-based format, and the desired content;

a linker database for identifying a content resource containing the desired content; and

30   a transformer engine operative to transform the desired content from the first SGML-based format into the second SGML-based format.

28. The server engine of claim 27, wherein said server engine includes a template database, further comprising:

a best fit analyzer operative for identifying a best fit template by retrieving constants stored in said template database which correlate to the characteristics of the client device and incorporating the constants into the best fit template; and

the transformer engine is further operative to transform the desired content based on the best fit template.

29. The server engine of claim 27 wherein said server engine includes an extensible style language transformation engine.

30. The server engine of claim 27, wherein the characteristics of the client device comprise at least one of the following characteristics:

        screen resolution;

        caching capabilities;

        device type;

        compression characteristics;

        decompression characteristics;

        network characteristics;

        bandwidth characteristics; and

        connection type.

31. A method for allowing various platforms to execute server-based applications through a network, the method comprising the steps of:

        receiving an invocation request from a client device, the invocation request identifying the client device and a server-based application;

        selecting an application interface particular to the client device;

        providing rendering information for the selected application interface to the client device;

        invoking the server-based application;

        receiving an action request from the client device;

        interpreting the action request to identify changes required to the application interface;

        providing rendering information for the changes to the application interface to the client device; and

        invoking a server-based application command in accordance with the action request.

32. A system for remotely accessing a server-based application, the system comprising a client and a server communicatively coupled to the client through a network, the client being operative to:

        invoke the server-based application by sending an invocation request to the server;

        receive an SGML-based application interface;

        display said SGML-based application interface;

    receive an actuation of an aspect of said SGML-based application interface;
and

    deliver a command to the server corresponding with said actuation; and
the server being operative to:

5   receive the invocation request from the client;

    extract client-specific information from the client and the invocation request;

    prepare an SGML-based application interface based on the client specific
information;

    transmit the SGML-based application interface to the client; and

10   receive a command corresponding to an actuation of an aspect of said SGML-
based application interface and in response to receiving said command prepare a modified
SGML-based application interface and deliver it to the client.